DOCUMENT RESUME

ED 025 320 PS 001 481

By- Pierce-Jones, John

Annual Research Report of Completed and Incomplete Investigations for National Head Start Evaluation.

Texas Univ., Austin. Child Development Evaluation and Research Center.
Spons Agency- Office of Economic Opportunity, Washington, D.C.
Report No- OEO-4115
Pub Date Aug 68
Note- 18p.
EDRS Price MF-$0.25 HC-$1.00
Descriptors- *Annual Reports, Bilingual Students, *Compensatory Education Programs, Language Proficiency, Mexican Americans, Motivation, *Preschool Programs, *Program Evaluation, Retention Studies, Test Construction
Identifiers- *Head Start

A list of nine completed investigations and two progress reports of incomplete investigations makes up this annual research report. One incomplete project is concerned with bilingual instruction and other compensatory education programs for Mexican-American children in the southwest. The objective of the other incomplete project is to examine relationships between motivational variables and retention processes. A bibliography is also included. (MS)

dup checked

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED025320

ANNUAL RESEARCH REPORT

OF

COMPLETED AND INCOMPLETE INVESTIGATIONS

FOR

NATIONAL HEAD START EVALUATION

TO

THE OFFICE OF ECONOMIC OPPORTUNITY
(Contract No. OEO-4115)

ED025320

BY

THE CHILD DEVELOPMENT EVALUATION AND RESEARCH CENTER

John Pierce-Jones, Ph.D., Director

The University of Texas at Austin

August, 1968

PS001481

ANNUAL RESEARCH REPORT

OF

COMPLETED AND INCOMPLETE INVESTIGATIONS

FOR

NATIONAL HEAD START EVALUATION

TO

THE OFFICE OF ECONOMIC OPPORTUNITY
(Contract No. OEO-4115)

BY

THE CHILD DEVELOPMENT EVALUATION AND RESEARCH CENTER

John Pierce-Jones, Ph.D., Director

The University of Texas at Austin

August, 1968

ANNUAL RESEARCH REPORT

COMPLETED INVESTIGATIONS

1. Administration Manual for Tests of Basic Language Competence in English and Spanish
   Level I (Preschool): Children Ages Three to Six
   English and Spanish Versions, Forms A and B
   By Edward John Cervenka, August, 1968

2. Administration Manual for Tests of Basic Language Competence in English and Spanish
   Level II (Primary Grades): Children Ages Six to Ten
   English and Spanish Versions, Forms A and B
   By Edward John Cervenka, August, 1968

3. Administration Manual for the Inventory of Socialization for Bilingual Children Ages Three to Ten
   By Edward John Cervenka, August, 1968

4. A Head Start Control Group
   By Grover Cunningham, August, 1968

5. The Relationship Between Specific and General Teaching Experience and Teacher Attitudes Toward Project Head Start
   By Swan Helge and John Pierce-Jones, August, 1968

6. Cooperative, Trusting Behavior as a Function of Ethnic Group Similarity-Dissimilarity and of Immediate and Delayed Reward in a Two-Person Game
   By Brad A. Manning, John Pierce-Jones, Rhona L. Perelman, August, 1968

7. The Shift from Color to Form Preference in Young Children of Different Ethnic Backgrounds
   By Charles Mac Spellmann, August, 1968

8. Dependence in Social Performance
   The Development of a Scale to Measure Level of Independence in Small Children
   By José L. Soto-Padin, August, 1968

9. An Investigation of the Standard-Nonstandard Dimension of Central Texan English
   By Walter Stolz and Garland Bills, August, 1968

INCOMPLETE INVESTIGATIONS

1. Bilingual Research Technical Report
   Progress Report
   By Edward John Cervenka

2. Motivation and Retention
   Progress Report
   By R. C. Mulry and Kent Houston

BILINGUAL RESEARCH

PROGRESS REPORT

EDWARD JOHN CERVENKA

Three separate batteries of instruments have been developed for use in the evaluation and experimental study of bilingual instruction programs and other compensatory education programs for Mexican-American children in the Southwest. Two batteries focus on the linguistic performance of children in English and Spanish. One battery focuses on the socialization of children in a bilingual setting. These three batteries, which are presented as a part of the Final Report dated August, 1968, are listed below by title and described briefly in terms of level, form, version, type of administration, sub-tests, etc.

Battery I: Tests of Basic Language Competence in English and Spanish, Level I, Preschool, Children Ages Three to Six, Forms A and B, English and Spanish Versions, Individually Administered, with 9 sub-tests entitled as follows:

No. 1. Oral Vocabulary
No. 2. Comprehension of Commands and Directions
No. 3. Recognition of Interrogative Patterns
No. 4. Phonemic Discrimination at the Word Level
No. 5. Production of Grammatical Structures
No. 6. Assimilation of Meaning
No. 7. Phonemic Discrimination at the Sentence Level
No. 8. Grammatical Sensitivity
No. 9. Grammatical Discrimination

Battery II: Tests of Basic Language Competence in English and Spanish, Level II, Primary Grades, Children Ages Six to Ten, Forms A and B, English and Spanish Versions, Group Administered, with 6 sub-tests entitled as follows:

- No. 1. Oral Vocabulary
- No. 2. Phonemic Discrimination at the Word and Phrase Levels
- No. 3. Phonemic Discrimination at the Sentence Level
- No. 4. Grammatical Sensitivity
- No. 5. Grammatical Discrimination
- No. 6. Assimilation of Meaning

Battery III: Inventory of Socialization for Bilingual Children Ages Three to Ten, One Level for Preschool and Primary Grades, Children Ages Three to Ten, One Form, English version only, with 4 Sub-Measures entitled as follows:

- No. 1. Me, Myself and I: A Self Concept Test (Group or individually administered)
- No. 2. Rating of Child's Interpersonal Behavior in an Interview (Individually administered)
- No. 3. Rating of Children's General Social Behavior in the Classroom (Completed by a person with extensive contact with a child in the classroom)
- No. 4. Questionnaire for an Interview of Parents with Children in Bilingual Programs (Completed by a team of two interviewers), with 6 parts entitled as follows:
  - Part I. Information about the Child
  - Part II. Information about People Living with the Child
  - Part III. Parents' Educational Aspirations for the Child
  - Part IV. Parents' Attitudes about Education and Bilingual Schooling
  - Part V. Rating of Socioeconomic Status of Family
  - Part VI. Language of Parent

Normative, interpretative, and critical information on all three batteries, as well as suggestions for scoring and revision, will be presented in a separate Technical Report, which is still in preparation.

The Technical Report will contain information derived from the following administrations and groups:

Battery I: Tests of Basic Language Competence in English and Spanish, Level I, Preschool

Group 1: 150 Mexican-American children, June, 1968, beginning of summer Head Start program, San Antonio, Texas (Form A in English, Form B in Spanish; Sub-tests Nos. 1, 2, 3, and 4 only)

Group 2: Approximately 35 Mexican-American children, Ages Three to Six, July, 1968, end of five months of schooling in an experimental, bilingual program, Brownsville, Texas (Form A in English, Form B in Spanish; Sub-tests Nos. 1-9)

Battery II: Tests of Basic Language Competence in English and Spanish, Level II, Primary Grades

Group 1: 120 Mexican-American, Anglo, and Negro children, Ages Six to Twelve, May, 1968, end of first year of an experimental, bilingual program, Creedmoor, Texas (Form A in English, Form B in Spanish; Sub-tests Nos. 1-6)

Group 2: 200 Mexican-American and Anglo children, Ages Six to Ten, May, 1968, end of the fourth year of an experimental, bilingual program, Laredo, Texas (Form A in English, Form B in Spanish; Sub-tests Nos. 1-6)

Group 3: 155 Advantaged, Monolingual, English-speaking, Anglo children, Ages Six to Ten, May, 1968, end of the year of a traditional program, San Antonio, Texas (Form B in English, Sub-tests No. 1-6; Form A in Spanish, Sub-test No. 1 only)

Battery III: Inventory of Socialization for Bilingual Children Ages Three to Ten

Group 1: 120 Mexican-American, Anglo, and Negro children, Ages Six to Twelve, May, 1968, end of first year of an experimental, bilingual program, Creedmoor, Texas (Sub-Measure No. 1 only)

Group 2: 150 Mexican-American children, June, 1968, beginning of a summer Head Start program, San Antonio, Texas (Sub-Measure Nos. 2 in English and Spanish)

Group 3: Approximately 25 Mexican-American parents of children, Ages Three to Six, in an experimental bilingual, preschool program, June-July, 1968, Brownsville, Texas (Sub-Measure No. 4)

Group 4: Approximately 50 Mexican-American, Anglo, and Negro parents of children, Ages Six to Twelve, June-July, 1968, end of first year of an experimental, bilingual program, Creedmoor, Texas (Sub-Measure No. 4)

Group 5: 30 Bilingual, Mexican-American preschool and secondary teachers from 15 experimental, bilingual programs in Texas (Rating of the desirability of the behavioral patterns listed on Sub-Measures No. 2 and 3)

Additional information relating to the performance of socially advantaged, monolingual, English-speaking children on the English Version, Form B, Sub-tests No. 1-6 of the Tests of Basic Language Competence in English and Spanish, Level II (Primary Grades), together with matters of a theoretical psychometric and psycholinguistic nature, will be presented in Psychometric Aspects of Child Language, by Edward J. Cervenka, Doctoral Dissertation, The University of Texas at Austin, January, 1969.

MOTIVATION AND RETENTION

PROGRESS REPORT

R. C. MULRY AND KENT HOUSTON

Objectives

The basic objective of the study proposed here is to examine relationships between motivational variables and memory or retention processes. Traditionally, research on memory functions has attended either to inferred intra-individual activities such as memory traces and rehearsal effects or to variables relating to the structure of the stimulus material or the material to be retained. Studies relating to the latter have been concerned with serial position, spacing of intervals between presentations of stimuli, cue similarity and similar variables. These studies have the feature in common that they have been primarily involved in answering questions having to do with <u>how</u> memory functions operate most efficiently.

The research proposed here will consider retention from the theoretical point of view of Rotter's Social Learning Theory (1954) and will address the question of <u>why</u> something is remembered. This emphasis, although different from that of more conventional research, shares an interest in accounting for the various variables and determinants that enter into a complete consideration of memory processes.

PS001481

From this social learning point of view, behavior is considered to occur as a function of the individual's expectation that certain actions on his part will lead to the attainment of reinforcements valued by him. That is, if an individual perceives a behavior or group of behaviors as relevant to the attainment of some valued reinforcement, then these behaviors are regarded as useful to him and are more likely to be retained in his response repetoire.

The purpose of the study is to investigate the hypothesis that, in a retention task where degree of learning has been controlled, retention will occur as a function of the expectation that the acquired information will be useful in the attainment of valued, future reinforcements. Thus, in a task where the expectancy and reinforcement variables are manipulated systematically, retention should be greatest in those conditions where the subject perceives the learned material as useful in later tasks and particularly so when these tasks are associated with the attainment of valued reinforcements.

General Design

The general design prescribes that all subjects will learn a serial learning task where they will be given a token for each correct response. Since one of the experimental variables is the manipulation of the subject's expectancy that the information learned is or is not useful in an attainment of rewards offered in the testing situation,

half of the subjects will be allowed to exchange their tokens for a gift (rewarded subjects) and half of the subjects will not (non-rewarded subjects). To hold reinforcement constant during learning, subjects will not know the value of this exchange until after the serial learning task has been completed.

Upon termination of the learning phase of the experiment, half of the subjects within each level of reinforcement will be told they will be called upon again to repeat the experiment and half of the subjects will not be told this. In short, half of the rewarded subjects will expect what they have learned will lead to future valued reinforcements and the other half will not. For the non-rewarded subjects, half will expect to do the task again and half will not. In these two groups, however, retention of the learned material should be less than for the rewarded groups since subjects will not perceive the retaining of such material as useful or relevant to them. Thus the experimental design may be summarized as having two levels of expectancy for each of the two levels of reinforcement which will necessitate four experimental groups to which subjects will be randomly assigned.

After completing the learning portion of the experiment, all subjects will be asked to wait in an adjacent room for approximately fifteen minutes during which time they will not be distracted. Following this phase of the experiment, all subjects will be tested

for their retention of the learned material. Subjects will then be dismissed and all will be given a small gift for their time and efforts.

Population and Sample

Approximately eighty preschool children enrolled in the Summer Head Start Program in San Marcos, Texas, will serve as subjects in this experiment.

Data to be Gathered

Three measures of the dependent variable of amount of retention will be collected. First, subjects will be asked to recall as many items from the original list of learned stimuli as they can (unaided recall 1). Second, subjects will be asked in what order these stimuli occurred (unaided recall 2). Third, subjects will be presented with the original stimuli but in random order and will be asked to reconstruct the original order (reconstruction-aided recall). Thus on the first measure, retention will be measured by the number of recalled items. On the second measure, on how well subjects recall the order of the original list, and on the third measure, how well subjects can reconstruct the original order of the items with the stimuli present.

Instruments to be Used

Eight line drawings of familiar objects (e.g., horse, cow, cat, dog) will be used in a serial learning task. Subjects will be

asked to learn the order in which the objects occur (e.g., to anticipate that in this particular task a picture of a horse follows a picture of a cat). Each subject will learn the series to a criterion of two errorless trials.

Relationship to the Current State of Knowledge in the Area to be Investigated

The significance of this proposed research rests primarily upon the potential value of employing a systematic psychological theory in the study of motivational determinants of memory functions. These writers believe that an inclusive theory of retention will have to account for the psychological variable of motivation as well as for outcomes of more conventional research which has dealt with the "mechanics" of memory (e.g., chunking, number of repetitions, interference, etc.). Illustrative of the latter concern are the research efforts of such investigators as Brown (1958), Ellis (1963), Spitz (1963), Koppel (1964) and Peterson (1966).

Assuming support for the major hypothesis of this research, that retention maintains a functional relationship to the value of the reward associated with the event to be recalled, a number of practical suggestions emerge. Namely, a researchable theory and methodology will be available for studying such common sense notions as, "We remember that which interests us." (William James, 1918, p. 404). Moreover, it raises questions concerning the validity of

certain assumptions commonly held about retention processes in general. For example, are disadvantaged individuals such as the socially deprived, lower-class children, the mentally retarded and older or senile people, less capable of remembering that which they have learned or are they simply less motivated to do so?

An equally, if not more important outcome of this research, are the suggestions it may provide for didactic activities in general. If retention can be explained, in part, through the use of motivational constructs we are in a position to say something about certain aspects of teaching. If, for example, an individual perceives the remembering of general information as pointless in terms of its practical and future usefulness, it is likely that such material will be retained only as long as the teacher is present to test him for it. In short, there is no reason for him to place it in long term storage. If, however, the individual can come to see a relationship between the information to be retained and some future and valued goal, it is more likely that such material will be remembered.

Perhaps the training of the culturally deprived and lower-class children lacks a very important and influential aspect that is operant in the education of middle and upper-class children. That being an understandable rationale that makes clear to students the relationship between the remembering of something and the value of doing so because it can be personally useful. If, for example, the

learning of arithmetic does have practical significance for the disadvantaged child, he should be helped to understand how this can lead to gratifications he desires. Perhaps the education of disadvantaged children should concentrate first on the reasons for learning and remembering and then on the actual didactic process.

Planned Analysis

Three two-way complex analyses of variance will be performed. The two factors will be (1) level of reward associated with the tokens and (2) expectancy for performing the task again. Separate analyses will be performed on the three dependent measures of retention discussed above.

SUPPORTING STATEMENT

1. Brief description of objectives of the research and procedures.

Names of Instrument(s)	Purpose of Specific Instrument	Sample	Administration
Serial learning task: Pictures of animals and objects. See attached copy.	Provide stimuli for serial learning task	80 preschool summer Head Start children	80 administrations of 30 minutes each +80 readministrations of 10 minutes each

Description of Experimental Procedure(s)	Purpose	Sample	Administration
1) Reward and expectancy	Effects of expected reward on retention	20	Serial learning tasks and readministration
2) Reward minus expectancy	Effects of reward on retention	20	"
3) Nonreward and expectancy	Test for effects on retention due to expectance only	20	"
4) Nonreward minus expectancy	Control group - baseline retention in the absence of experimental manipulations	20	"

PROGRESS REPORT

Three pilot studies aimed at the clarification of methodological problems were completed during the month of June. Data collection has been completed and statistical analyses are being performed.

Preparatory work for a replication and extension of the study has begun. The second study involves Head Start children in New Braunfels, Texas. Data analyses will be done during the last part of August and completed during September.

REFERENCES

Brown, J. Some tests of the decay theory of immediate memory. Quart. J. of exp. Psychol., 1958, 10, 12-21.

Ellis, N. R. The stimulus trace and behavioral inadequacy. In N. R. Ellis (Ed.), Handbook of Mental Deficiency. New York: McGraw-Hill, 1963.

James, W. The Principles of Psychology. New York: Dever Publications, Inc., 1918.

Koppel, G. Facilitation in short- and long-term retention of paired associates following distributed practice in learning. J. of Verbal Learning and Verbal Behavior, 1964, 3, 91-111.

Peterson, L. R. Reminiscence in short-term retention. J of exp. Psychol., 1966, 71, 115-118.

Rotter, J. B. Social Learning and Clinical Psychology. New York: Prentice-Hall, 1954.

Spitz, H. H. Field theory in mental deficiency. In N. R. Ellis (Ed.), Handbook of Mental Deficiency. New York: McGraw-Hill, 1963.